

**STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.**

ATTORNEYS AT LAW

1100 NEW YORK AVENUE, N.W. • WASHINGTON, D.C. 20005-3934

PHONE: (202) 371-2600 • FACSIMILE: (202) 371-2540 • www.skgsf.com

ROBERT GREENE STERNE  
EDWARD J. KESSLER  
JORGE A. GOLDSTEIN  
SAMUEL L. FOX\*\*\*  
DAVID K.S. CORNWELL  
ROBERT W. ESMOND  
TRACY-GENE G. DURKIN  
MICHELE A. CIMBALA  
MICHAEL B. RAY  
ROBERT E. SOKOHL  
ERIC K. STEFFE  
MICHAEL Q. LEE  
STEVEN R. LUDWIG

JOHN M. COVERT  
LINDA E. ALCORN  
ROBERT C. MILLONIG  
MICHAEL V. MESSINGER  
JUDITH U. KIM  
TIMOTHY J. SHEA, JR.  
DONALD R. MCPHAIL  
PATRICK E. GARRETT  
JEFFREY T. HELVEY\*  
HEIDI L. KRAUS  
JEFFREY R. KURIN  
RAYMOND MILLIEN  
PATRICK D. O'BRIEN

LAWRENCE B. BUGAISKY  
CRYSTAL D. SAYLES  
EDWARD W. YEE  
ALBERT L. FERRO\*  
DONALD R. BANOWIT  
PETER A. JACKMAN  
MOLLY A. MCCALL  
TERESA U. MEDLER  
JEFFREY S. WEAVER  
KRISTIN K. VIDOVICH  
KENDRICK P. PATTERSON  
DONALD J. FEATHERSTONE  
GRANT E. REED

VINCENT L. CAPUANO  
JOHN A. HARROUN\*  
ALBERT J. FASULO II\*  
ELDORA ELLISON FLOYD\*  
W. RUSSELL SWINDELL  
THOMAS C. FIALA  
BRIAN J. DEL BUONO\*  
VIRGIL L. BEASTON\*  
RYAN J. STAMPER\*  
KAREN R. MARKOWICZ\*\*  
SUZANNE E. ZISKA\*\*  
ANDREA J. KAMAGE\*\*  
NANCY J. LEITH\*\*

ELIZABETH J. HAANES\*\*  
MARK P. TERRY\*\*  
JOSEPH M. CONRAD, III\*\*  
DOUGLAS M. WILSON\*\*  
REGINALD D. LUCAS\*\*  
ANN E. SUMMERFIELD\*\*  
CYNTHIA M. BOUCHEZ\*\*  
HELENE C. CARLSON\*\*  
BRUCE E. CHALKER\*\*  
DUSTIN T. JOHNSON\*\*  
MATTHEW J. DOWD\*\*

\*LIMITED TO MATTERS  
AND PROCEEDINGS BEFORE  
FEDERAL COURTS & AGENCIES  
\*\*REGISTERED PATENT AGENT  
\*\*\*SENIOR COUNSEL

May 10, 2001

WRITER'S DIRECT NUMBER:

(202) 371-2628

INTERNET ADDRESS:

KPATTERS@SKGF.COM

Commissioner for Patents  
Washington, D.C. 20231

**Box Patent Application**

Re: U.S. Non-Provisional Utility Patent Application under 37 C.F.R. § 1.53(b)  
Appl. No. To Be Assigned; Filed: Herewith  
For: **Method, System and Computer Program Product for Measuring Unit  
Activity of an Enzyme**  
Inventors: Nellis *et al.*  
Our Ref: 0942.5110000/LEA/KPP

Sir:

The following documents are forwarded herewith for appropriate action by the U.S.  
Patent and Trademark Office:

1. PTO Fee Transmittal (Form PTO/SB/17) (*in duplicate*);
2. PTO Utility Patent Application Transmittal (Form PTO/SB/05);
3. U.S. Utility Patent Application entitled:

**Method, System and Computer Program Product for Measuring Unit  
Activity of an Enzyme**

and naming as inventors:

David Nellis  
Stephanie Nilsen

Commissioner for Patents

May 10, 2001

Page 2

the application consisting of:

- a. A specification containing:
  - i. 33 pages of description prior to the claims;
  - ii. 6 pages of claims (24 claims);
  - iii. a one (1) page abstract;
- b. 8 sheets of drawings: (Figures 1-8);
- c. An original executed Declaration;
- d. Application Data Sheet;
- e. Our check No. 31267 for \$822.00 to cover:  
\$710.00 filing fee for patent application;  
\$72.00 fee for excess claims;  
\$40.00 Assignment recordation fee;
4. Authorization to Treat a Reply As Incorporating An Extension of Time Under 37 C.F.R. § 1.136(a)(3) (*in duplicate*);
5. Recordation Form Cover Sheet;
6. An original executed Assignment to Invitrogen Corporation, recordation of which is hereby respectfully requested;
7. Two (2) return postcards.

It is respectfully requested that, of the two attached postcards, one be stamped with the filing date of these documents and returned to our courier, and the other, prepaid postcard, be stamped with the filing date and unofficial application number and returned as soon as possible.

051001 051001 051001

Descriptive Statistics		Frequency	
Variable	Mean	Count	Percentage
Age	25.5	100	100%
Gender	Male	50	50%
Gender	Female	50	50%
Marital Status	Married	30	30%
Marital Status	Single	70	70%
Education	High School	20	20%
Education	College	30	30%
Education	Postgraduate	50	50%
Income	\$10,000	10	10%
Income	\$15,000	20	20%
Income	\$20,000	30	30%
Income	\$25,000	40	40%
Income	\$30,000	50	50%
Income	\$35,000	60	60%
Income	\$40,000	70	70%
Income	\$45,000	80	80%
Income	\$50,000	90	90%
Income	\$55,000	100	100%
Income	\$60,000	110	110%
Income	\$65,000	120	120%
Income	\$70,000	130	130%
Income	\$75,000	140	140%
Income	\$80,000	150	150%
Income	\$85,000	160	160%
Income	\$90,000	170	170%
Income	\$95,000	180	180%
Income	\$100,000	190	190%
Income	\$105,000	200	200%
Income	\$110,000	210	210%
Income	\$115,000	220	220%
Income	\$120,000	230	230%
Income	\$125,000	240	240%
Income	\$130,000	250	250%
Income	\$135,000	260	260%
Income	\$140,000	270	270%
Income	\$145,000	280	280%
Income	\$150,000	290	290%
Income	\$155,000	300	300%
Income	\$160,000	310	310%
Income	\$165,000	320	320%
Income	\$170,000	330	330%
Income	\$175,000	340	340%
Income	\$180,000	350	350%
Income	\$185,000	360	360%
Income	\$190,000	370	370%
Income	\$195,000	380	380%
Income	\$200,000	390	390%
Income	\$205,000	400	400%
Income	\$210,000	410	410%
Income	\$215,000	420	420%
Income	\$220,000	430	430%
Income	\$225,000	440	440%
Income	\$230,000	450	450%
Income	\$235,000	460	460%
Income	\$240,000	470	470%
Income	\$245,000	480	480%
Income	\$250,000	490	490%
Income	\$255,000	500	500%
Income	\$260,000	510	510%
Income	\$265,000	520	520%
Income	\$270,000	530	530%
Income	\$275,000	540	540%
Income	\$280,000	550	550%
Income	\$285,000	560	560%
Income	\$290,000	570	570%
Income	\$295,000	580	580%
Income	\$300,000	590	590%
Income	\$305,000	600	600%
Income	\$310,000	610	610%
Income	\$315,000	620	620%
Income	\$320,000	630	630%
Income	\$325,000	640	640%
Income	\$330,000	650	650%
Income	\$335,000	660	660%
Income	\$340,000	670	670%
Income	\$345,000	680	680%
Income	\$350,000	690	690%
Income	\$355,000	700	700%
Income	\$360,000	710	710%
Income	\$365,000	720	720%
Income	\$370,000	730	730%
Income	\$375,000	740	740%
Income	\$380,000	750	750%
Income	\$385,000	760	760%
Income	\$390,000	770	770%
Income	\$395,000	780	780%
Income	\$400,000	790	790%
Income	\$405,000	800	800%
Income	\$410,000	810	810%
Income	\$415,000	820	820%
Income	\$420,000	830	830%
Income			

Please type a sign (+) inside the box →

PTO/SB/05 (03-01)

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE  
for use through 10/31/2002. OMB 0651-0032  
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

# UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR § 1.53(b))

Attorney Docket No. 0942.5110000

First Inventor David Nellis

Title Method, System, and Computer Program Product for Measuring Unit Activity of An Enzyme

Express Mail Label No.

## APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

ADDRESS TO:

Assistant Commissioner for Patents  
Box Patent Application  
Washington, DC 20231

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original, and a duplicate for fee processing)

2. ☐ Applicant claims small entity status.  
See 37 CFR 1.27.

3. ☒ Specification [Total Pages 40]  
(preferred arrangement set forth below)  
- Descriptive title of the invention  
- Cross Reference to Related Applications  
- Statement Regarding Fed sponsored R & D  
- Reference to sequence listing, a table, or a computer program listing appendix  
- Background of the invention  
- Brief Summary of the invention  
- Brief Description of the Drawings (if filed)  
- Detailed Description  
- Claim(s)  
- Abstract of the Disclosure

4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 8]

5. ☒ Oath or Declaration [Total Pages 2]  
a. ☒ Newly executed (original or copy)  
b. ☐ Copy from a prior application (37 CFR 1.63(d))  
(for continuation/divisional with Box 18 completed)

i. ☐ DELETION OF INVENTOR(S)  
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR §§ 1.63(d)(2) and 1.33(b).

6. ☒ Application Data Sheet. See 37 CFR 1.76.

7. ☐ CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)

8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)

a. ☐ Computer Readable Form (CRF)

b. Specification Sequence Listing on:

i. ☐ CD-ROM or CD-R (2 copies); or

ii. ☐ paper

c. ☐ Statements verifying identity of above copies

## ACCOMPANYING APPLICATION PARTS

9. ☒ Assignment Papers (cover sheet & document(s))

10. ☐ 37 CFR 3.73(b) Statement ☐ Power of Attorney  
(when there is an assignee)

11. ☐ English Translation Document (if applicable)

12. ☐ Information Disclosure Statement (IDS)/PTO-1449 ☐ Copies of IDS Citations

13. ☐ Preliminary Amendment

14. ☒ Two (2) Return Receipt Postcard (MPEP 503)  
(Should be specifically itemized)

15. ☐ Certified Copy of Priority Document(s)  
(if foreign priority is claimed)

16. ☐ Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.

17. ☒ Other: Authorization under 37 C.F.R. § 1.136(a)(3)

☐ Other: The name of the assignee is:

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-Part (CIP)  
Prior application information: Examiner

of prior application No: /  
Group/Art Unit:

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

## 19. CORRESPONDENCE ADDRESS

☒ Customer Number or Bar Code Label

Customer No. 26111

(Insert Customer No. or Attach bar code label here)

or ☐ Correspondence address below

NAME	STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.			
	Attorneys at Law			
ADDRESS				
CITY	STATE	ZIP CODE		
COUNTRY	TELEPHONE	FAX		

NAME (Print/Type)	Kendrick P. Patterson	Registration No. (Attorney/Agent)	45,321
SIGNATURE	<i>K. Patterson</i>	Date	10 May 2001

Burden Hour Statement: this form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

SKGF Rev 3/29/01 mac

nonprovapp.sb05

**FEE TRANSMITTAL  
for FY 2001**

Patent fees are subject to annual revision.

**Complete if Known**

Application Number	To Be Assigned
Filing Date	Herewith
First Named Inventor	David Nellis
Examiner Name	To Be Assigned
Group Art Unit	To Be Assigned
Attorney Docket No.	0942.5110000/LEA/KPP

TOTAL AMOUNT OF PAYMENT (\$822.00)

**METHOD OF PAYMENT (check one)**

- 1.
- ☐
- The Commissioner is hereby authorized to charge indicated fees and credit any overpayment to:

Deposit Account Number 19-0036

Deposit Account Name Sterne, Kessler, Goldstein & Fox P.L.L.C.

- ☐
- Charge Any Additional Fee Required Under 37 CFR §§ 1.16 and 1.17

- ☐
- Applicant claims small entity status See 37 CFR 1.27

- 2.
- ☒
- Payment Enclosed:

☒ Check ☐ Credit card ☐ Money Order ☒ Other\*

\*Charge any deficiencies or credit any overpayments in the fees or fee calculations of Parts 1, 2 and 3 below to Deposit Account No. 19-0036.

**FEE CALCULATION****1. BASIC FILING FEE**

Large Fee Code	Entity Fee (\$)	Small Fee Code	Entity Fee (\$)	Fee Description	Fee Paid
101	710	201	355	Utility filing fee	710.00
106	320	206	160	Design filing fee	
107	490	207	245	Plant filing fee	
108	710	208	355	Reissue filing fee	
114	150	214	75	Provisional filing fee	

SUBTOTAL (1) (\$) 710.00

**2. EXTRA CLAIM FEES**

	Extra	Fee from below	Fee Paid
Total Claims <u>24</u> - 20** = <u>4</u> X <u>18</u> = <u>72.00</u>			
Indep. Claims <u>3</u> - 3** = <u>0</u> X <u>80</u> = <u>00.00</u>			
Multiple Dependent <u>0</u> = <u>0</u>			

Large Fee Code	Entity Fee (\$)	Small Fee Code	Entity Fee (\$)	Fee Description
103	18	203	9	Claims in excess of 20
102	80	202	40	Independent claims in excess of 3
104	270	204	135	Multiple dependent claim
108	80	209	40	**Reissue independent claims over original patent
110	18	210	9	**Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$) 72.00

\*\*or number previously paid, if greater; For Reissues, see above

**3. ADDITIONAL FEES**

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee paid
105	130	205	65	Surcharge - late filing fee or oath	
127	50	227	25	Surcharge - late provisional filing fee or cover sheet	
139	130	139	130	Non-English specification	
147	2,520	147	2,520	For filing a request for ex parte reexamination	
112	920*	112	920*	Requesting publication of SIR prior to Examiner action	
113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action	
115	110	215	55	Extension for reply within first month	
116	390	216	195	Extension for reply within second month	
117	890	217	445	Extension for reply within third month	
118	1,390	218	695	Extension for reply within fourth month	
128	1,890	228	945	Extension for reply within fifth month	
119	310	219	155	Notice of Appeal	
120	310	220	155	Filing a brief in support of an appeal	
121	270	221	135	Request for oral hearing	
138	1,510	138	1,510	Petition to institute a public use proceeding	
140	110	240	55	Petition to revive - unavoidable	
141	1,240	241	620	Petition to revive - unintentional	
142	1,240	242	620	Utility issue fee (or reissue)	
143	440	243	220	Design issue fee	
144	600	244	300	Plant issue fee	
122	130	122	130	Petitions to the Commissioner	
123	130	123	130	Petitions related to provisional applications	
126	180	126	180	Submission of Information Disclosure Stmt	
581	40	481	40	Recording each patent assignment per property (times number of properties)	40.00
146	710	246	355	Filing a submission after final rejection (37 CFR 1.129(a))	
149	710	249	355	For each additional invention to be examined (37 CFR 1.129(b))	
179	710	279	355	Request for Continued Examination (RCE)	
169	900	169	900	Request for expedited examination of a design application	

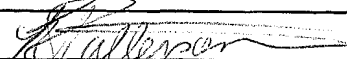
Other fee (specify):

Other fee (specify):

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$) 40.00

**SUBMITTED BY****Complete (if applicable)**

Name (Print/Type)	Kendrick P. Patterson	Registration No. (Attorney/Agent)	45,321	Telephone	202-371-2600
Signature		Date	10 May 2001		

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

09852093 051001  
T00T50 2602586

PATENT APPLICATION SERIAL NO. \_\_\_\_\_

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE  
FEE RECORD SHEET

05/11/2001 SHINASS1 00000045 09052093

01 FC:101	710.00 OP
02 FC:103	72.00 OP
03 FC:581	40.00 OP

PTO-1556  
(5/87)

\*U.S. GPO: 2000-468-987/39595